



## Habilitationsvortrag und -kolloquium im Fachbereich Physik

**Dr. Beatriz Olmos Sanchez**

**am 26. Januar 2022 um 16.15 Uhr  
als Videokonferenz**

### **Physics of earthquakes**

Earthquakes are the result of the global motion of the earth plates. In this talk, I will review some of the current knowledge we have on earthquakes. I will discuss the origin of earthquakes, their detection, and the associated parameters that can be measured by current seismic techniques, together with how we determine the magnitude of an earthquake. I will also comment on how the earthquakes may interact at very long distances. Finally, I will give an overview of the most successful current theories based on classical mechanics that try to explain the origin and features of earthquakes.

[1] H. Kanamori, and E.E. Brodsky, *The physics of earthquakes*, Rep. Prog. Phys. 67, 1429 (2004)

[2] H. Kanamori, *Earthquake physics and real-time seismology*, Nature 451, 271 (2008)